Nikon FM2

The Perfectionist's Nikon

Command

You take everything

It's the age of innovation and technology.
your art, or your life. You're a perfectionist. Auto
For you, pictures are not just pictures. They're
you and you alone can create. You need a camera that
exactly what type—a 35mm SLR. Meet the Nikon
gaining and exercising greater control over every
wonder it's already being hailed

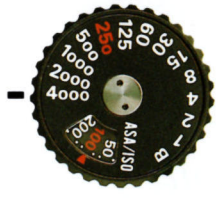
The all-new FM2: the camera that

Photography

in your hands.

But you won't allow them to intrude on
mation is fine but you want to be in command. Period.
images meant to last forever: your images. Those that
responds to your needs and wants perfectly. And you know
FM2. With this brand-new camera, you'll find yourself
type of photography you're into, and relishing it. No
as "The Perfectionist's Nikon."

puts everything in your hands.

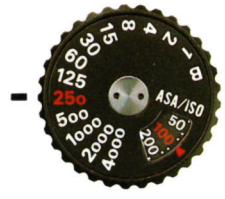


At 1/4000 sec. the Nikon FM2 has the world's fastest shutter speed.

Subjects just about impossible to shoot. Things that happen in the twinkling of an eye. Now captured by the FM2's top shutter speed which is the fastest available in 35mm SLR photography. Made possible by the FM2's unique use of a mechanical shutter with vertically travelling titanium shutter curtains. 58% lighter than the metals normally used in vertically travelling shutter curtains, they travel faster across the film aperture and stop just as fast because of low inertia, thus eliminating shutter bounce and image blur at all shutter speeds, including 1/4000 sec. Another fantastic feat by Nikon. And the kind of technology that lets the FM2 let you have things your way. All the way.

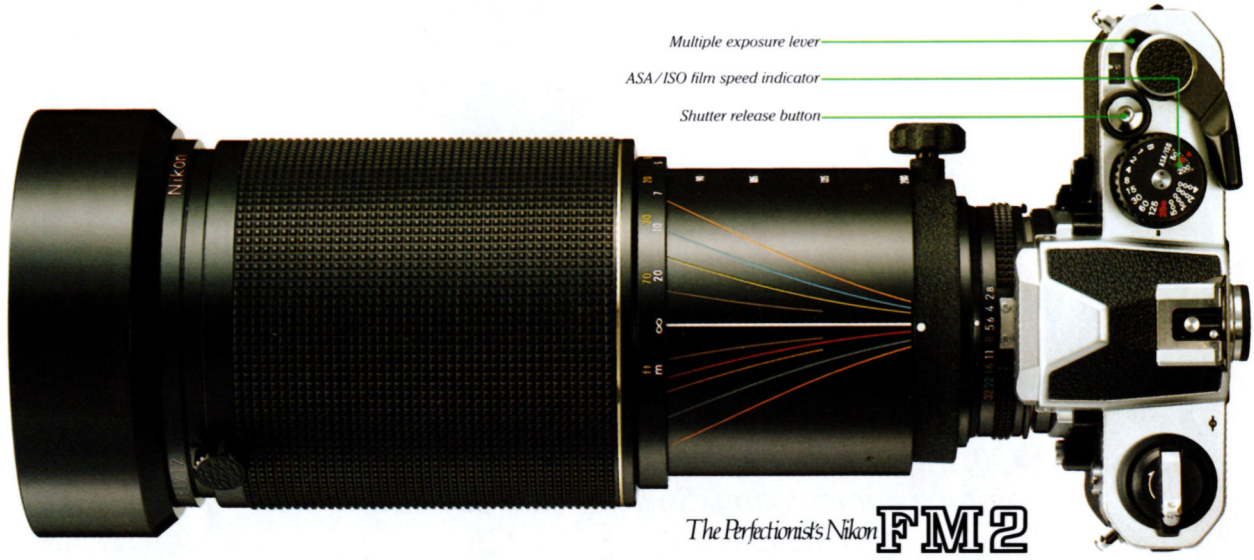
The Perfectionist's Nikon **FM2**

1/250sec. X-Sync



The fast sync of 1/250sec.

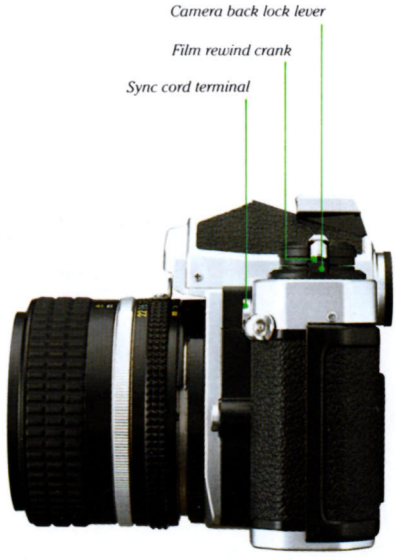
Photographers with an eye for synchro-sunlight or fill-in flash photography will appreciate the Nikon FM2's flash sync speed of 1/250sec. This high speed allows you to open the lens up to its maximum aperture in broad daylight for fill-in photos that really deserve the name. What's more, as you increase speed to the peak of 1/250sec., the selective focus effect becomes available for truly creative flash photography.



The Perfectionist's Nikon **FM2**

ASA/ISO 12-6400

An unprecedented, ultra-wide ASA/ISO range of 12-6400.
No other camera in the FM2's class offers an ASA/ISO range as wide. You can handle virtually any picture-taking situation, armed with the extensive choice of films usable with the FM2. Special-purpose films for photomacrography, for instance. Or high-contrast litho films for making the title slides for a slide presentation. You can push film speeds at will, too—up to 6400, the fastest—and make up for low light. Consider, too, the opportunity for experimentation. So go ahead. Say but the word, and watch the FM2 execute it. Perfectly. The way you want it.



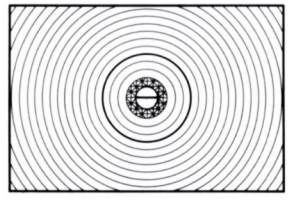
The Perfectionist's Nikon FM2

Multiple Exposures

Multiple-exposure photography at the tip of your fingers.

The FM2 offers you the technique—and many pleasures—of multiple-exposure photography. Manual or motor-driven, the FM2's film transport mechanism keeps every frame precisely in place. This type of perfect frame registration makes double or multiple-exposure photography as easy to master as it is rewarding. And because the FM2's multiple-exposure lever is naturally positioned close to the shutter release button and film advance lever or motor drive grip, you have total fingertip control of the picture-taking situation.

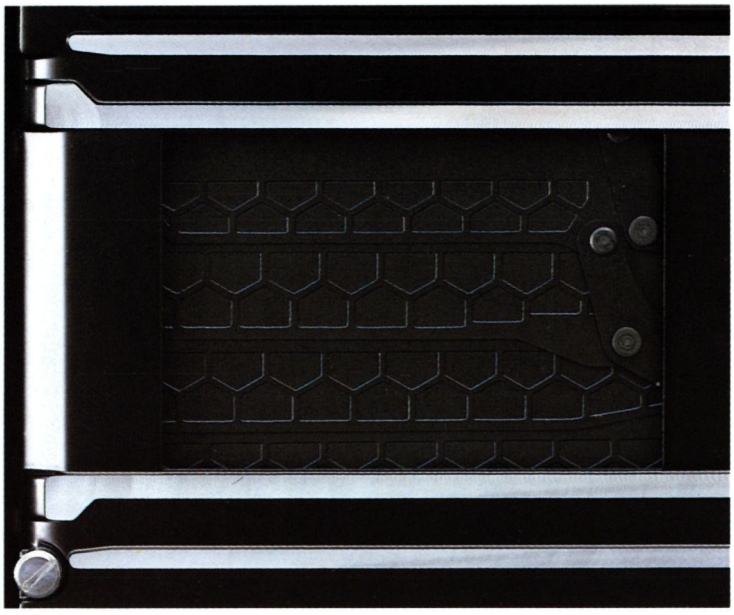
Interchangeable Screens



Type K2

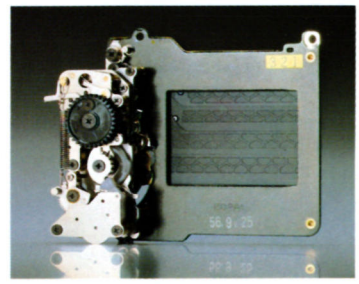
Brighter, clearer interchangeable screens

The FM2 uses brighter, clearer interchangeable focusing screens that assure a bright viewfinder and at the same time makes critical focusing easy even in dim light. So the image you see is sure to be in pinpoint focus. The FM2 comes supplied with the standard split-image/microprism Type K2 for general photography. Also available are Type B2, a matte/Fresnel focusing screen with a focusing spot that's great for doing closeups or for use with telephoto lenses, and Type E2, a matte/Fresnel screen with horizontal and vertical lines, that is ideal for architectural photography or for use with PC-Nikkor lenses.



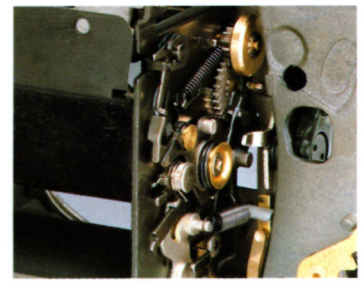
Vertically travelling titanium shutter curtains—a world first

What confronted Nikon's engineers was both a problem and a challenge: how to realize a top shutter speed of 1/4000 sec. without sacrificing correct exposure. Theoretically, narrowing the slit of the shutter curtains can achieve this, but uneven exposure is likely to result from even the minutest change in the width of the slit when high shutter speeds are in actual use. Thus, to achieve a top speed of 1/4000 sec. and at the same time make the slit as wide as possible for correct exposure, Nikon's engineers decided to enhance the travelling speed of the shutter curtains by reducing their travelling mass. And this could only be done by using a material with a low specific gravity—titanium which has a specific gravity of 4.5 compared to the 7.8 of other metal alloys. To reduce the thickness of the curtains, they were etched in a modified honeycomb pattern in three different thicknesses—thus reducing weight by approx. 58% compared with other metal alloys. The modified honeycomb structure was designed to strengthen the thin curtains as a whole and to prevent fast-running shutter curtains from getting warped and thus causing light leakage. At their thinnest, the etched shutter curtains are a mere 0.02 mm thick; thus, to further enhance the strength of the curtains, nitriding was adopted. In addition to all this, a self-lubricating or "oil-less" metal was used in the bearing of the shutter to



minimize friction at this section. The use of oil-less metal enables stable performance even at very low temperatures without fear of lubricating oil shortage. It goes without saying, too, that Nikon improved the accuracy of all the parts used in the camera's shutter to maintain constant shutter curtain travel speed. Finally, a special improvement was made in the brakes of the first and second shutter curtains to obtain even braking from both curtains so there is no variation in the speed which might be caused by the shock due to the sudden stop of curtain movement.

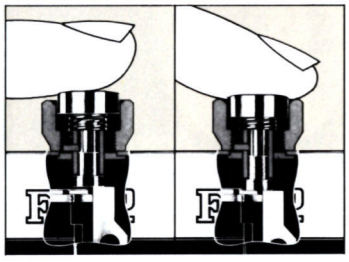
The end result of all this is that the FM2's shutter boasts a curtain travel speed of only 3.6 milliseconds. Despite this, there is very little inertia when the curtains travel and stop, preventing shutter bounce—which means no image blur throughout the shutter speed range of 1/4000 to 1 sec. The peak X-sync speed of 1/250 sec. is also realized.



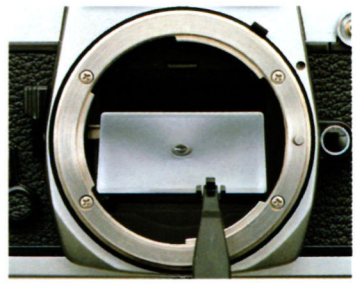
Large, quiet-moving, silvered mirror

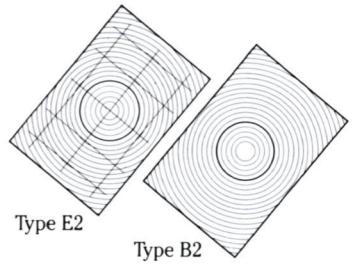
The use of a big mirror assures that there is negligible vignetting even with an 800 mm super-telephoto lens. Virtually vibration and bouncing-free mirror-up movement is assured by a controlling gear and gear control wheel. The mirror-up spring coil incorporates a special rubber foam to help minimize sound—complemented by the use of rubber foam inside the mirror box to absorb shock and further reduce noise. In addition, titanium is used in the mirror frame to ensure light, smooth and precise mirror movement, even during the constant pounding of motor-driven photography. The mirror is silver-coated, contributing to a bright viewfinder image.

Ultra-smooth film winding and film transport
Five clusters of ball bearings are used in the FM2's film winding mechanism for smooth film winding. Also, the FM2 has the same durable yet smooth film transport mechanism of other Nikon cameras. Sure film travel is assured by the large film pressure plate and by the long, polished guide rails. Thus, manual or motor-driven, your photography remains ever precise from first frame to last.

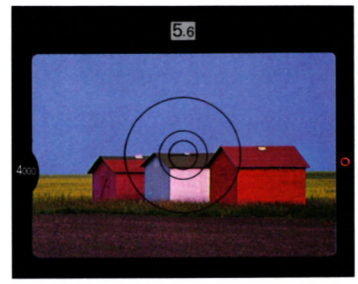


Fail-safe meter on/off switch
The meter is switched on when the shutter release button is lightly pressed to fingerguard position, simultaneously activating the LED exposure display. It stays on for approx. 30 seconds, which is long enough for the creative-minded photographer to compose his picture and perform metering, then automatically switches off—thus saving on power.



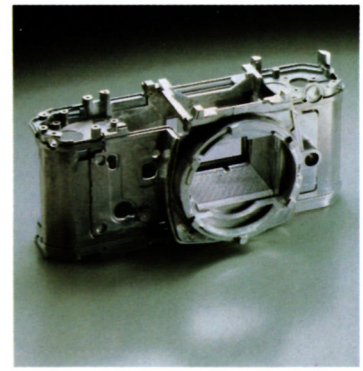


Interchangeable focusing screens
Three different types of focusing screens are usable with the Nikon FM2. The Type K2 split-image microprism screen which, with its three focusing aids, split-image, microprism and matte outer field, is ideal for general photography, comes with the camera as standard equipment. There's also the optional Type B2 matte/Fresnel screen with a focusing spot which comes in handy for closeups or when using telephoto lenses. And the interchangeable Type E2 matte/Fresnel screen with etched horizontal and vertical lines which is recommended for architectural photography or when you're shooting with PC-Nikkor lenses. The optional B2 and E2 screens come with tweezers for easy focusing screen interchange.



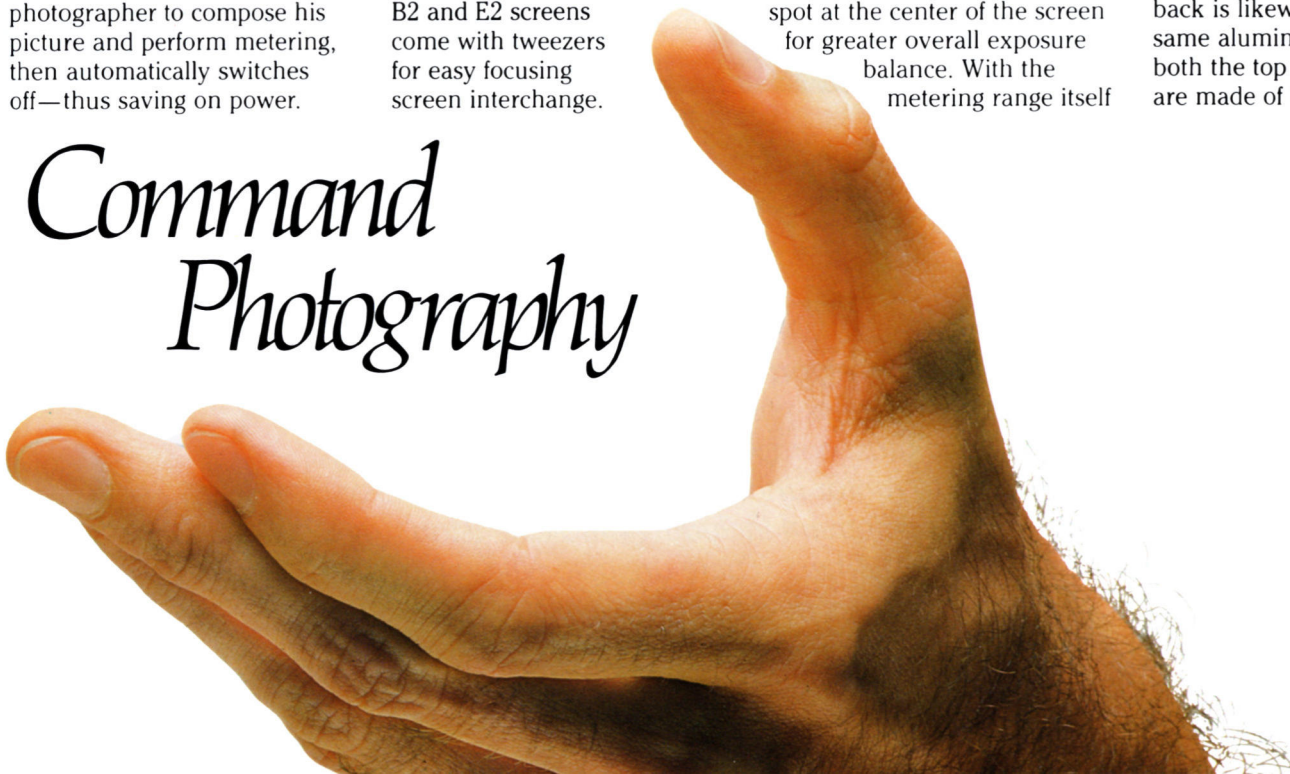
Bright viewfinder, plus exposure information when you want it
The bright viewfinder image is due to the camera's use of a silver-coated pentaprism. If you want to confirm exposure, just press the shutter release button lightly and take a look at the FM2's viewfinder display. The 3-point LED array, which is visible in any light or even where there's no light at all, gives the following readouts—
+: more than +1 EV
$\overset{+}{\bigcirc}$: +1 EV to +0.2 EV
○: correct exposure
$\overset{-}{\bigcirc}$: −1 EV to −0.2 EV
−: less than −1 EV
Also indicated are the shutter speed and ADR (aperture direct readout) lens aperture in use.

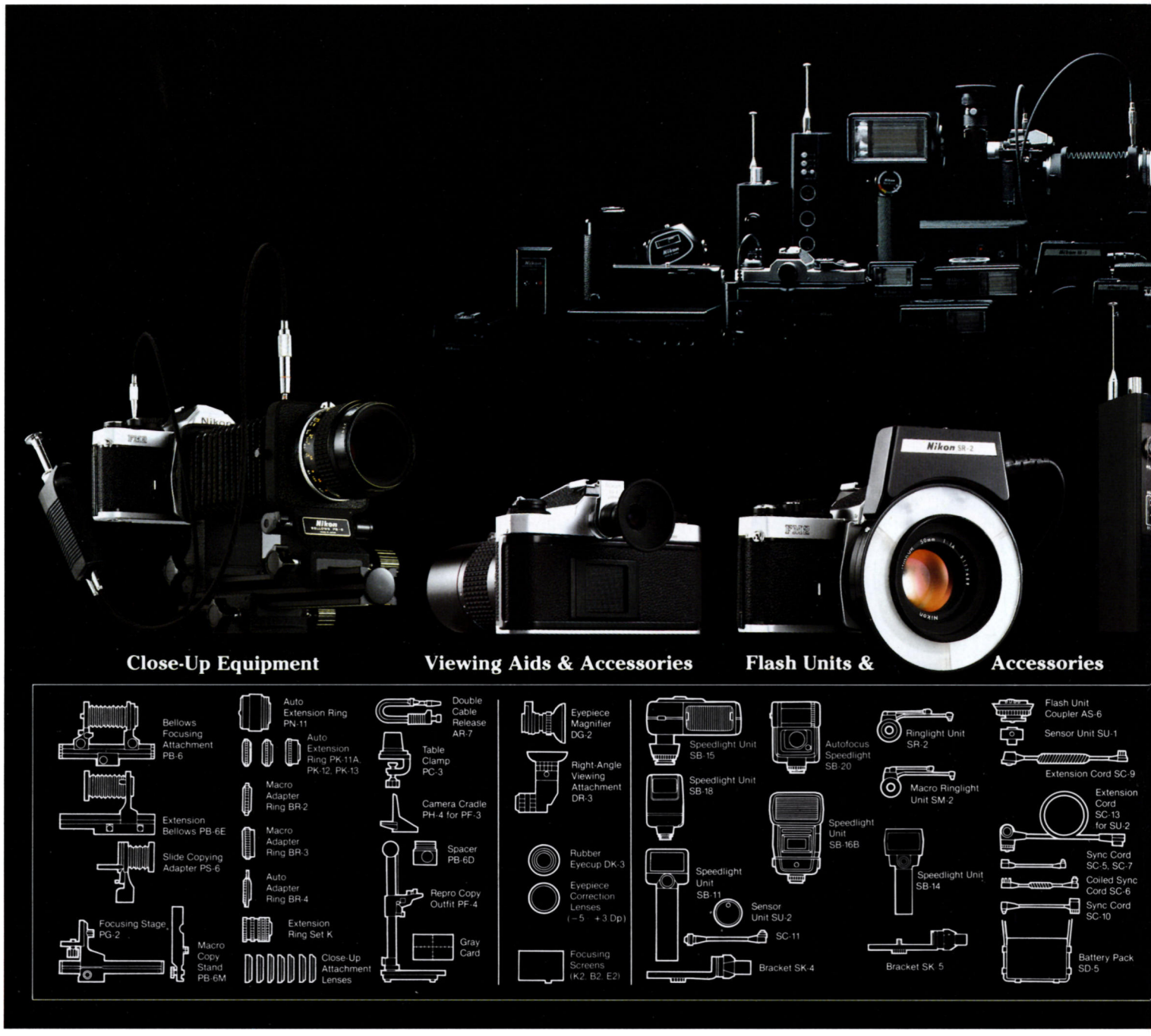
Performance-proven center-weighted metering
The FM2's TTL exposure metering system uses a pair of SPD's (silicon photodiodes) for enhanced stability of measurement, backed by Nikon's original FRE (Functional Resistance Element) and a monolithic IC. The meter is 60%-weighted towards the 12 mm-diameter spot at the center of the screen for greater overall exposure balance. With the metering range itself extending from EV 1 to EV 18 (i.e., f/1.4 at 1 sec. to f/8 at 1/4000 sec. with a 50 mm f/1.4 lens at ASA/ISO 100), you are assured of tip-top performance even in bright or dim light.



Durable, die-cast body
Only the most select materials are used in the making of the Nikon FM2 to assure you of many years of rewarding photography. The two-piece, die-cast body, in particular, is made of copper silumin aluminum alloy which is as rigid as it is corrosion-resistant. With a high tensile strength of approx. 33.5 kg/mm² (475.5 lb/in²), this material ensures that the FM2 will withstand the most rugged treatment. The thickness of the casting's walls is never less than 1.4 mm, while the portion that attaches to the bayonet mount is 2 mm thick... to ensure both rigidity and strength. Also, the body is treated with black Alunite and coated with black paint for extra resistance against corrosion. The camera back is likewise made of the same aluminum alloy while both the top and bottom covers are made of brass.

Command Photography





FM2 System

Go ahead—create your own Nikon System.

Quite naturally the FM2 gives you access to the Nikon System of Photography, the most comprehensive in all 35mm SLR photography. In addition to motor drive and electronic flash subsystems, there are all kinds of closeup equipment including auto extension rings, bellows, Nikkor lenses for close-ups, and others. There are also Nikon filters, plus such useful Nikon System accessories as a right-angle viewing attachment, a cable release, eyepiece correction lenses and an assortment of lens hoods, camera/lens cases, bags and many more.

Motor Drive & Remote Control Accessories

AC Unit SA-3

Battery Pack

AC Unit

NC Battery SN-3

NC Battery Charger SH-3

Motor Drive MD-12

1m Remote Cord MC-4A

Remote Cord MC-10 With Button Release

Terminal Shutter MR-3

Radio Control Set MW-2

Modulite Remote Control Set ML-1

Intervalometer MT-2

Other Accessories

Pistol Grip Model 2

Connecting Cord MC-3A for Pistol Grip

Cable Release AR-6 for Pistol Grip

Data Back MF-16

Panorama Head AP-2

Anti-Cold Battery Holder DB-2

Shutter Cable Release AR-3

Release Adapter AR-8

Semi-Soft CF-27, CF-28

Semi-Soft Front Flap CF-28A

Semi-Soft CF-29

Soft CS-16

Base Portion CF-27D (for MF-16)

Soft CS-7, 8, 9, 10

Blimp Camera Case CS-13

Compartment Cases

Leather Neck Strap AN-1

Nylon Neck Strap AN-4B, AN-4Y

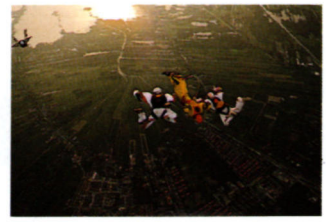
Wide Nylon Neck Strap AN-6Y, AN-6W

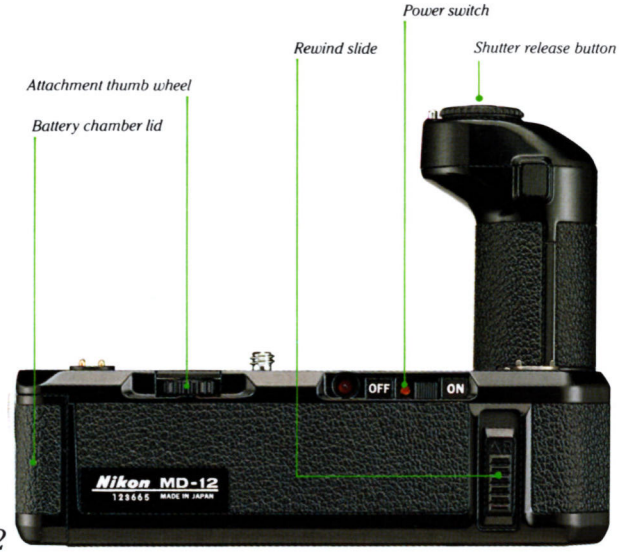
Motor Drive

With a motor drive, you won't miss any of the action.
Attach the MD-12 to the FM2, and you're into motor drive photography. By automatically advancing the film and readying the shutter for the next shot, the MD-12 gives you total concentration on precisely the image you want to create. You can shoot single frames or multiple exposures or try sequential shooting at a rate of up to 3.2 frames per second. No more "shots that got away." Lightly pressing the motor drive's trigger activates the FM2's exposure meter, so you get to respond to the situation instantly.

Specifications of MD-12

Camera fitting
Nikon FM2, Nikon FA, Nikon FE2
Shooting speed
3.2 fps approx. maximum (at shutter speeds faster than 1/125 sec.) when used with Nikon FM2.
Shooting mode
Single frame (S)
Continuous (C)
Usable shutter speeds
At "S" setting
FM2: 1 ~ 1/4000 sec.
At "C" setting
FM2: 1/2 ~ 1/4000 sec.
Pilot lamp
LED lights up when in operation
Power switch
On/off switch provided (also acts as camera's meter switch)
Meter switch
Trigger button also acts as meter "on" switch and automatically goes "off" approx. 50 seconds later
Remote control
Possible; uses standard Nikon 3-pin connector.
Power source
Eight 1.5V penlight batteries (AA size, in integral battery chamber)
Weight
Approx. 410g (without batteries)
Dimensions
Approx. 144 × 36 × 42 mm; approx. 144 × 68.5 × 109.5 mm (including the grip)





Motor Drive MD-12

Electronic Flash

Electronic flash removes the difference between night and day.
Where there's little light or no light at all, let a Nikon Speedlight be your guide. A Nikon electronic flash unit is just right for low-light indoor or nighttime shooting, or as supplementary lighting for synchro-sunlight photography. You even have the added advantage of using a fast flash sync of 1/250 sec., too. And because the FM2 has a hot-shoe contact, you can directly mount the Nikon SB-15, SB-16B, SB-20 or SB-18 Speedlight. You're never in the dark: the ready-light visible inside the FM2's viewfinder tells you when the flash unit is fully charged and ready to fire. With the SB-15, it blinks when the shutter speed set is beyond the synchronization range.

Specifications of SB-15

Light output control
Silicon thyristor-controller rectifier and series circuitry; automatic control with Nikon FM2 and other Nikon SLR's

Guide number
25 (ASA/ISO 100 and meters) at full output;
7 in motor-driven photography

Bounce flash
Possible by rotating flash head up to 90° upwards

Recycling time
Approx. 8 sec.

Number of flashes
1) 60 with manganese batteries at full output
2) 160 with alkaline-manganese batteries at full output

Angle of coverage
Horizontal: 56° (67° when using wide-adapter SW-6)
Vertical: 40° (48° when using wide-adapter SW-6)

Power source
Four 1.5V AA-type penlight batteries

Mounting
Standard ISO-type foot

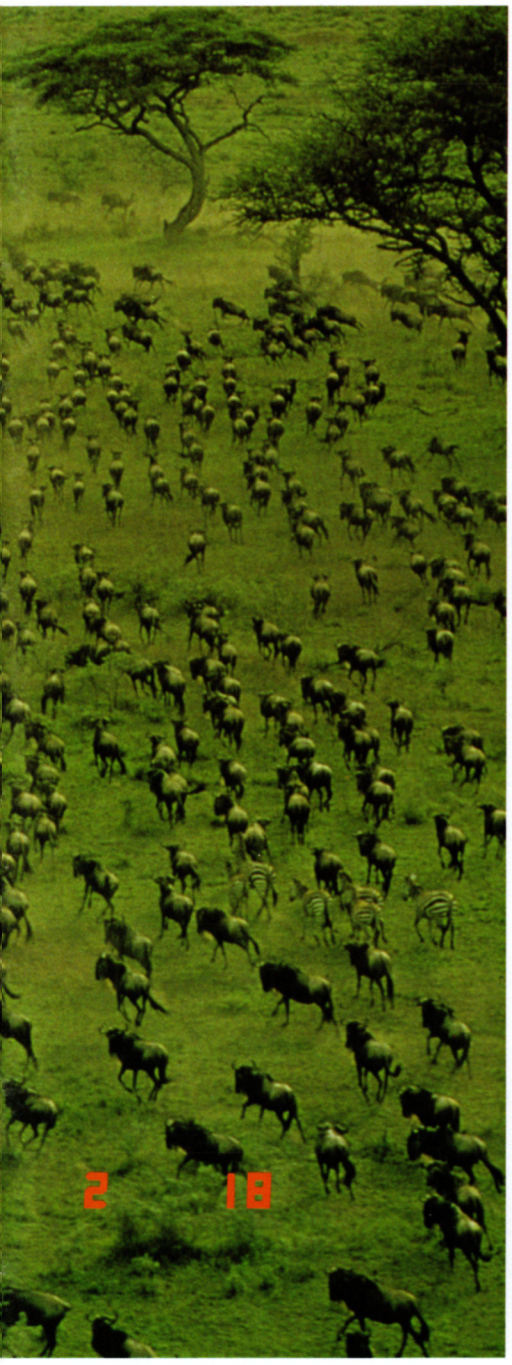
Dimensions
Approx. 100 × 90 × 36 mm (excluding mounting foot)

Weight
Approx. 270 g (excluding batteries)

Speedlight SB-15

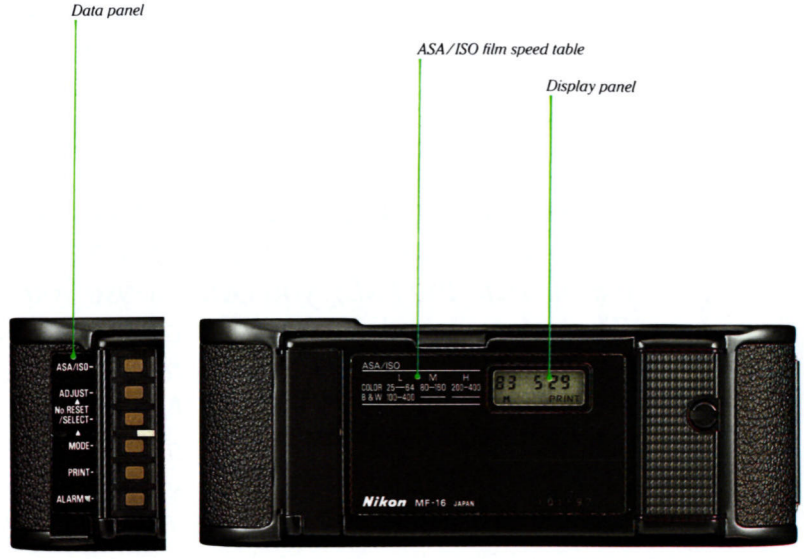
Data Back

And here's how you keep track of your photography.
Change the FM2's camera back with the MF-16, and you're ready to record data. Your choice of Year/Month/Day, Day/Hour/Minute or any 2-digit number. Perfect for scientific or research-type photography. For business, or for occasions you want to remember in detail. The MF-16 offers an extra: an LCD quartz clock with alarm that is precision-programmed until the year 2100. There's also the optional CF-27D Camera Case Base Portion which holds the FM2 with the MF-16 attached.



Specifications of MF-16

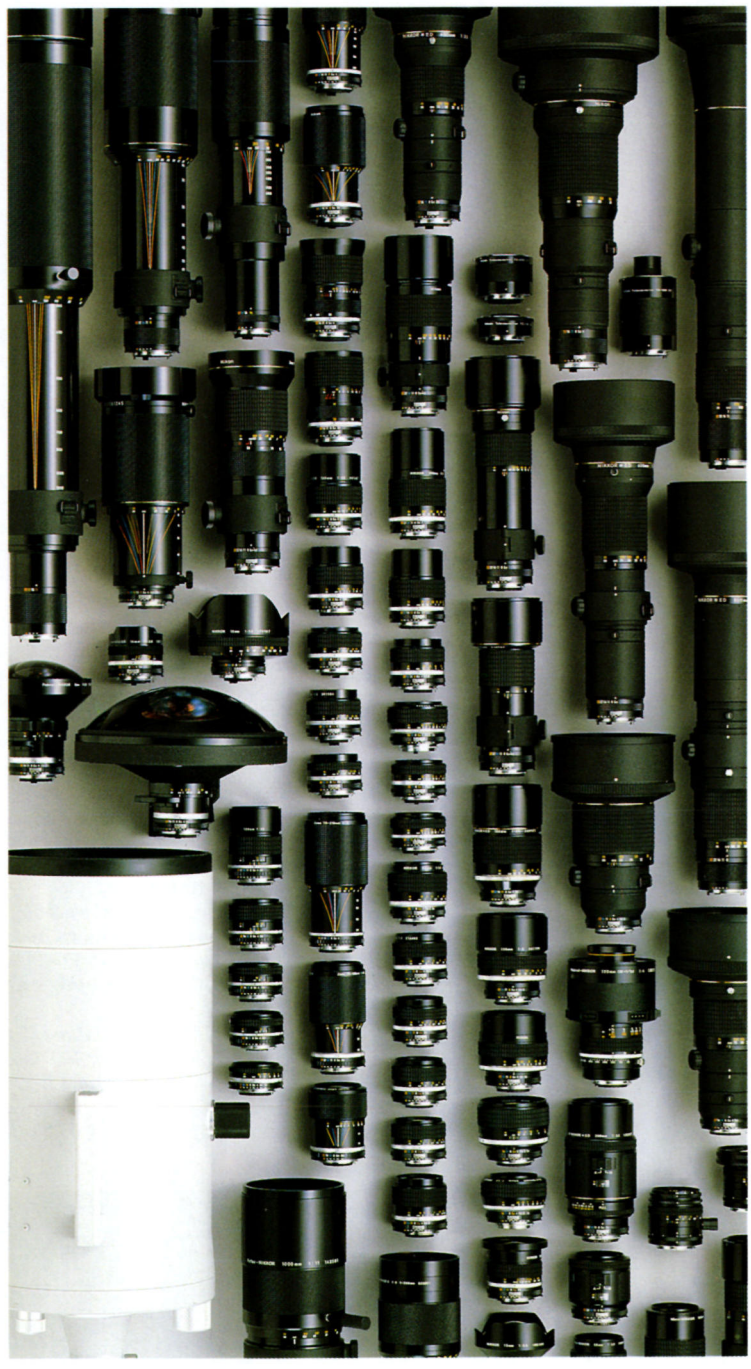
Usable cameras
Nikon FM2, Nikon FA, Nikon FE2
Attachment
Interchangeable with regular camera back
ASA/ISO film speeds
Black and White: ASA/ISO 100—400
Color: ASA/ISO 25—400
Film speed selection
3 step by pushing the ASA/ISO film speed button
Data imprinting
Via a 6 digit 7 segment LEDs on pressure plate
Data imprinting in lower right-hand corner of frame at instant of exposure
Data possibilities
Year-Month-Day, Day-Hour-Minute, or no. of pictures
Data selection and setting
Via MODE button, No. RESET/SELECT button and ADJUST button
Dating available until 2100, automatic adjustment of year change
Size of imprinted data
Letter height 0.5mm, total width of letter display 6.6mm
Imprint signal
Via direct contacts on camera body
Data display
Via 6 digit 7 segment LCD on display panel
Timing
Quartz oscillator
Timing accuracy
Within ±30 seconds per month without adjustments for irregular months or leap years
Audio alarm (clock mode)
20sec.-long at the time set
Power source
Two 1.55V silver-oxide batteries (SR-44 type)
Dimensions
Approx. 53mm(H)×142.5mm(W)×26.5mm(D)
Weight (without batteries)
Approx. 90g
Accessory
Camera Case Base Portion CF-27D



Data Back MF-16

Interchangeable Lenses

Completing the picture: a wide choice of the sharpest lenses.
With more than 70 current Nikkor and Nikon Series E lenses usable with the FM2, you can choose your very own window on the world. These lenses include anything and everything from a mind-boggling 6mm fisheye to a far-out 2000mm. Each one is made of Nikon's own optical glass and treated with Nikon's original NIC (Nikon Integrated Coating) coating for greater contrast and natural color rendition. High resolving power, faster speed, better color rendition, name it—these lenses have it. They're the perfect match for your camera.



NIKKOR LENSES

Wideangle
13mm f/5.6 28mm f/2
15mm f/3.5 28mm f/2.8
18mm f/3.5 35mm f/1.4
20mm f/2.8 35mm f/2
24mm f/2 35mm f/2.8
24mm f/2.8

Normal
50mm f/1.2
50mm f/1.4
50mm f/1.8

Telephoto
85mm f/1.4
85mm f/2
105mm f/1.8
105mm f/2.5
135mm f/2
135mm f/2.8
180mm f/2.8 ED
200mm f/2 IF-ED
200mm f/4
300mm f/2 IF-ED
300mm f/2.8 IF-ED
300mm f/4.5 IF-ED
300mm f/4.5
400mm f/2.8 IF-ED
400mm f/3.5 IF-ED
400mm f/5.6 IF-ED
600mm f/4 IF-ED
600mm f/5.6 IF-ED
800mm f/5.6 IF-ED
1200mm f/11 IF-ED

Reflex
500mm f/8
1000mm f/11
2000mm f/11

Zoom
35—70mm f/3.3—4.5
35—70mm f/3.5
28—85mm f/3.5—4.5
35—105mm f/3.5—4.5
35—135mm f/3.5—4.5
35—200mm f/3.5—4.5
80—200mm f/4
50—300mm f/4.5 ED
100—300mm f/5.6
200—400mm f/4 ED
180—600mm f/8 ED

Fisheye
6mm f/2.8
8mm f/2.8
16mm f/2.8

Special Purpose
PC 28mm f/3.5
PC 35mm f/2.8
Noct 58mm f/1.2
Micro 105mm f/2.8
Micro 200mm f/4 IF
Medical 120mm f/4 IF
105mm f/4.5 UV

NIKON SERIES E LENSES
28mm f/2.8
135mm f/2.8
70—210mm f/4 Zoom

TELECONVERTERS
TC-14A TC-14B TC-14C*
TC-201 TC-301

* Comes supplied with
300mm f/2 IF-ED (not optional)

Specifications

Type of camera
35 mm single-lens reflex (SLR)
Usable film
Any cartridge-type 35 mm film
Picture format
24 mm × 36 mm
Lens mount
Nikon bayonet mount; meter coupling lever provided; meter coupling lever release button not provided
Lenses
More than 70 current Nikkor and Nikon Series E lenses*
Shutter
Vertical-travel, metal, focal plane, mechanical shutter with titanium curtains
Shutter release
Mechanical; center-threaded shutter release button accepts AR-3 Cable Release; button locked when film advance lever is flush with camera body
Shutter speed settings
1/4000 sec.—1 sec., B (Bulb), 14 discreet settings in all
Film advance lever
Single-stroke type; 30° stand-off angle and 135° winding angle
Self-timer
Set/cancel mechanical type provided; approx. 10-sec. shutter release delay
Viewfinder
Eye-level pentaprism type; 0.86X magnification with 50 mm lens set at infinity; finder coverage approx. 93% of picture field
Viewfinder display
Shutter speed, ADR (aperture direct readout) f/number in use, and five different LED exposure displays using +, ○ and—signs
Focusing screen
Split-image microprism type (Type K2) provided as standard; matte type (B2) and matte with horizontal and vertical line etchings (E2) also available; screens usable with Nikon FA and FE2
Reflex mirror
Automatic quick-return type incorporating special control gear and wheel-and-brake mechanism for reduced vibration and noise; non-lockable type
Depth-of-field preview lever
Provided
Motor drive coupling
Electrical contact and coupler built-in for operation with Motor Drive MD-12; the MD-12 is operable when film advance lever is flush with camera body
Multiple exposure lever
Provided; disengages frame counter for correct count
Frame counter
Additive type (S..1—36); automatically resets to S when camera back is opened
Film rewind
By crank provided after film rewind button is pressed
Accessory shoe
Provided; standard ISO type; ready-light contact provided
Flash synchronization
Built-in ISO-type hot-shoe; threaded sync cord terminal provided for off-camera or multi-flash photography; synchronization with electronic flash units at speeds up to 1/250 sec.
Ready-light
LED provided; visible inside viewfinder; lights up when SB-15, SB-16B, SB-20 or SB-18 Speedlight Unit used is fully charged; blinks to warn that the shutter speed set is beyond the electronic flash's sync range when the SB-15, SB-16B, SB-20 or SB-18 is used
Exposure metering
Through-the-lens center-weighted full aperture exposure measuring system using a pair of SPDs (silicon photodiodes) and metering monolithic IC circuit
Metering range
EV 1 to EV 18 at ASA/ISO 100 and with f/1.4 lens (i.e., from 1 sec. at f/1.4 to 1/4000 sec. at f/8)
Film sensitivity range
ASA/ISO 12—ASA/ISO 6400
Power source
Choice of one 3 V lithium battery (CR-1 3N type), two 1.55 V silver-oxide batteries (S-76 or SR-44 type), or two 1.5 V alkaline-manganese batteries (LR-44 type); optional Anti-Cold Battery Holder DB-2 accepting two AA-type penlight batteries available
Exposure meter switch
Light pressure on shutter release button switches meter on; meter stays on for approx. 30 sec. after finger leaves button, then automatically switches off; meter automatically turned off when shutter speed dial is set at B
Battery power checker
LED exposure display inside viewfinder lights up when exposure meter is switched on if there is sufficient power (i.e., shutter speed dial is set anywhere except B)
Camera back
Pops open when the film rewind knob is pulled up as the camera back lock is pushed; detachable and interchangeable with Data Back MF-16; memo holder provided
Body finish
Chrome and black available
Dimensions (camera body only)
Approx. 142.5 mm (W) × 90 mm (H) × 60 mm (D)
Weight (camera body only)
Approx. 540 g

**The PC-Nikkor 35 mm f/2.8, PC-Nikkor 28 mm f/4, Zoom-Nikkor 200-600 mm f/9.5, Zoom-Nikkor 180-600 mm f/8 ED, Zoom-Nikkor 360-1200 mm f/11 ED, Reflex-Nikkor 1000 mm f/11 and Reflex-Nikkor 2000 mm f/11 may not be usable—depending on the year of manufacture. For confirmation or modification, please check with a Nikon authorized dealer or service center in your country.*

Specifications and designs shown herein are subject to change without notice.

Nikon cameras have been flying in space on NASA's manned spacecraft program ever since the APOLLO program. It also includes SKYLAB and the joint venture APOLLO-SOYUZ.

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Printed in Japan (8803/A)
Code No. 8CE40700